I claim:

1.   A system for capturing stereoscopic images and
related data in a format that facilitates interpretation of
the images and data by a human viewer or processing by a
computer or other electronic processing device, comprising:

   a first projector arranged to project a first two-
dimensional pattern onto a three-dimensional subject,
wherein a frequency of light forming said first two-
dimensional pattern is different than a frequency of light
illuminating said subject;

   a receiver arranged to optically separate an image of
said first two-dimensional pattern from an image of said
three-dimensional subject based on said different
frequencies of said light forming said first two-
dimensional pattern and said light illuminating said
subject.

2.   A system as claimed in claim 1, wherein said first
     two-dimensional pattern is a grid.

3.   A system as claimed in claim 1, wherein said light
     forming said first two-dimensional pattern is infrared
     light and said light illuminating said subject is
     visible light.

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4. A system as claimed in claim 1, further comprising a second projector, said second projector being arranged to project a second two-dimensional pattern onto said subject from a different angle than said first projector, and said second two-dimensional pattern having a different frequency than said light forming said first two-dimensional pattern.

5. A system as claimed in claim 4, further comprising a second receiver arranged to optically separate an image of said second two-dimensional pattern from an image of said three-dimensional subject based on said different frequencies of said light forming said second two-dimensional pattern and said light illuminating said subject.

6. A system as claimed in claim 4, wherein said receiver is further arranged to optically separate an image of said second two-dimensional pattern from said image of said first two-dimensional pattern.

7. A system as claimed in claim 6, wherein said receiver includes a pair of beam splitters, one of which is arranged to separate said image of said first two-dimensional pattern from said image of said subject, and the second of which is arranged to separate said

image of said second two-dimensional pattern from said image of said first two-dimensional pattern.

8. A system as claimed in claim 1, wherein said receiver includes a beam splitter arranged to separate said image of said first two-dimensional pattern from said image of said subject.

9. A system as claimed in claim 1, further comprising a second projector arranged to project a second two-dimensional pattern onto said subject, at least one of said projectors having an adjustable orientation such that alignment of said first and second two-dimensional patterns enables a distance to said subject to be determined.

10. A system as claimed in claim 9, wherein at least one of said projectors is arranged to project a hash mark onto a corresponding one of said grids in order to provide a reference for alignment of said grids.

11. A system as claimed in claim 1, further comprising a range-finding device arranged to determine a distance to from said receiver or projector to said subject.

12. A system as claimed in claim 11, wherein said range-finding device is a laser range-finding device.

13. A system as claimed in claim 11, wherein said range-finding device is arranged to determine a distance to at least one discrete point on said two-dimensional pattern.

14. A system as claimed in claim 13, wherein said at least one discrete point is a hash mark.

15. A system as claimed in claim 13, wherein said at least one discrete point is an intersection of lines in a two-dimensional grid.

16. An airline security system, comprising:

first and second projectors arranged to project a pair of infrared grids onto a person within an airport or airplane;

at least one receiver arranged to separate said images of infrared grids from a visible light image of said person, and to separate said images of said infrared grids from each other for separate processing.

17. A tracking, target acquisition, or guidance system, comprising:

first and second projectors arranged to project a pair of two-dimensional grids onto a moving object and to move in order to track the object;

at least one receiver arranged to separate images of said grids from an image of said object based on different wavelengths of light illuminating said object and light forming said grids.

18. A system as claimed in claim 17, wherein said projectors are further arranged to cause said grids to align, thereby determining a distance to said object.

19. A system as claimed in claim 17, further comprising a range-finding device arranged to determine a distance to at least one predetermined point on at least one of said grids.

20. A system as claimed in claim 17, wherein said range-finding device is a laser range-finding device.

21. A system as claimed in claim 20, wherein said predetermined point is a hash mark.

22. A system as claimed in claim 20, wherein said predetermined point is an intersection of two lines of one of said grids.

23. A method for capturing stereoscopic images and related data in a format that facilitates interpretation of the images and data by a human viewer or processing by a computer or other electronic processing device, comprising the steps of:

projecting a first two-dimensional pattern onto a three-dimensional subject, wherein a frequency of light forming said first two-dimensional pattern is different than a frequency of light illuminating said subject;

optically separating an image of said first two-dimensional pattern from an image of said three-dimensional subject based on said different frequencies of said light forming said first two-dimensional pattern and said light illuminating said subject.

24. A method as claimed in claim 23, further comprising the step of projecting a second two-dimensional pattern onto said subject from a different angle than an angle at which said first two-dimensional pattern is projected, and said second two-dimensional pattern having a different frequency than said light forming said first two-dimensional pattern.

25. A method as claimed in claim 23, further comprising the step of aligning first and second said two-

dimensional patterns to determine a distance to said subject.

26. A method as claimed in claim 23, further comprising the step of using a range finder to determine a distance to a predetermined point on said two-dimensional pattern.

27. A method as claimed in claim 26, wherein said range finder is a laser range-finding device.